

WHAT IS CLAIMED IS:

1 1. A method of training a computer system via human voice
2 input from a human teacher, the computer system having a text to speech engine and
3 a speech recognition engine, the method comprising:
4 presenting a text spelling of an unknown word;
5 receiving a human voice pronunciation of the unknown word from the
6 human teacher;
7 determining a phonetic spelling of the unknown word with the speech
8 recognition engine based on the human voice pronunciation of the unknown word;
9 and
10 associating the text spelling with the phonetic spelling to allow the
11 text to speech engine to correctly pronounce the unknown word in the future when
12 presented with the text spelling of the unknown word.

1 2. The method of claim 1 wherein the phonetic spelling includes
2 a sequence of phonemes.

1 3. The method of claim 1 wherein the phonetic spelling includes
2 a sequence of known words.

1 4. The method of claim 1 wherein after presenting the text
2 spelling of the unknown word, the computer system, using speech output, requests
3 to receive the human voice pronunciation of the unknown word.

1 5. The method of claim 4 wherein the request from the computer
2 system takes a form of an ongoing dialog between the computer system and the
3 human teacher.

1 6. The method of claim 5 further comprising:
2 establishing a plurality of request statements, each request statement
3 having an information content level, the information content levels ranging from a

4 low information content level to a high information content level, the plurality of
5 request statements being used by the computer system during the ongoing dialog.

1 7. The method of claim 6 wherein presenting, receiving,
2 determining, and associating are repeated for a plurality of unknown words, and
3 wherein the information content level for the request statements in the ongoing
4 dialog progressively lessens as presenting, receiving, determining, and associating
5 are repeated.

1 8. A method of training a computer system via human voice
2 input from a human teacher, the computer system having a speech recognition
3 engine, the method comprising:

4 receiving a human voice pronunciation of an unknown word from the
5 human teacher;

6 determining a phonetic spelling of the unknown word with the speech
7 recognition engine based on the human voice pronunciation of the unknown word;

8 receiving a known word that is related in meaning to the unknown
9 word; and

10 associating the known word with the phonetic spelling of the
11 unknown word to allow the speech recognition engine to correctly recognize the
12 unknown word in the future as related in meaning to the known word.

1 9. The method of claim 8 wherein receiving the known word
2 further comprises:

3 receiving a human voice pronunciation of the known word from the
4 human teacher.

1 10. The method of claim 8 wherein receiving the known word
2 further comprises:

3 receiving a text spelling of the known word.

1 11. A computer readable storage medium having instructions
2 stored thereon that direct a computer to perform a method of training a computer

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3 system via human voice input from a human teacher, the computer system having
4 a text to speech engine and a speech recognition engine, the medium further
5 comprising:

6 instructions for presenting a text spelling of an unknown word;

7 instructions for receiving a human voice pronunciation of the
8 unknown word from the human teacher;

9 instructions for determining a phonetic spelling of the unknown word
10 with the speech recognition engine based on the human voice pronunciation of the
11 unknown word; and

12 instructions for associating the text spelling with the phonetic spelling
13 to allow the text to speech engine to correctly pronounce the unknown word in the
14 future when presented with the text spelling of the unknown word.

1 12. The medium of claim 11 wherein the phonetic spelling
2 includes a sequence of phonemes.

1 13. The medium of claim 11 wherein the phonetic spelling
2 includes a sequence of known words.

1 14. The medium of claim 11 wherein after presenting the text
2 spelling of the unknown word, the computer system, using speech output, requests
3 to receive the human voice pronunciation of the unknown word.

1 15. The medium of claim 14 wherein the request from the
2 computer system takes a form of an ongoing dialog between the computer system
3 and the human teacher.

1 16. The medium of claim 15 further comprising:

2 instructions for establishing a plurality of request statements, each
3 request statement having an information content level, the information content levels
4 ranging from a low information content level to a high information content level, the
5 plurality of request statements being used by the computer system during the
6 ongoing dialog.

1 17. The medium of claim 16 wherein presenting, receiving,
2 determining, and associating are repeated for a plurality of unknown words, and
3 wherein the information content level for the request statements in the ongoing
4 dialog progressively lessens as presenting, receiving, determining, and associating
5 are repeated.

1 18. A computer readable storage medium having instructions
2 stored thereon that direct a computer to perform a method of training a computer
3 system via human voice input from a human teacher, the computer system having
4 a speech recognition engine, the medium further comprising:

5 instructions for receiving a human voice pronunciation of an unknown
6 word from the human teacher;

7 instructions for determining a phonetic spelling of the unknown word
8 with the speech recognition engine based on the human voice pronunciation of the
9 unknown word;

10 instructions for receiving a known word that is related in meaning to
11 the unknown word; and

12 instructions for associating the known word with the phonetic spelling
13 of the unknown word to allow the speech recognition engine to correctly recognize
14 the unknown word in the future as related in meaning to the known word.

1 19. The medium of claim 18 wherein the instructions for receiving
2 the known word further comprise:

3 instructions for receiving a human voice pronunciation of the known
4 word from the human teacher.

1 20. The medium of claim 18 wherein the instructions for receiving
2 the known word further comprise:

3 instructions for receiving a text spelling of the known word.